

CLAIMS

I Claim:

1. An implement for clearing brush and trees, comprising:
a self-propelled vehicle;
at least one boom mounted upon the vehicle; said boom being
constructed for articulated motion of a distal end thereof;
a cutting disk operatively mounted for rotation to the distal end of said
boom to cut brush and trees when rotated; and
a secondary power source supported on the self-propelled vehicle and
used to primarily power the cutting disk.
2. An implement according to claim 1 and further comprising:
a plurality of detachable cutting disk teeth mounted upon an inner face
of the cutting disk; upon an outer face of the cutting disk; and peripherally about
peripheral portions of the cutting disk.
3. An implement according to claim 1 wherein the secondary power
source comprises a secondary engine operatively connected primarily to the cutting
disk for rotation thereof.

4. An implement according to claim 1 and further comprising:
a cutting head pivotally mounted to the distal end of said boom; said
cutting head supporting the cutting disk for rotation relative the distal end of the
boom; and said cutting head providing selective pivot action of the cutting disk
about a pivot axis oriented generally vertically relative the self-propelled vehicle.

5. An implement according to claim 4 and further comprising:
a cutting head swivel operatively connected to the cutting head; said
cutting head swivel providing selective swivel action of the cutting disk about a
swivel axis which is generally traverse to the pivot axis of the cutting head.

6. An implement for clearing brush and trees, comprising:
a cutting head frame;
a motor mounted to the cutting head frame;
a drive shaft operatively coupled to the motor for rotation; said drive
shaft constructed to be selectively uncoupled from the motor;
a bearing mechanism removably secured to the cutting head frame and
supporting the drive shaft for the rotation;
a cutting disk mounted on the drive shaft for rotation therewith; and
wherein the bearing mechanism can be detached from the cutting head
to facilitate replacement of the bearing mechanism and drive shaft.

7. An implement according to claim 6 wherein the bearing
mechanism and drive shaft are constructed to be detached from the cutting head as
a unit.

8. An implement according to claim 6 and further comprising:
a first jaw formed in a portion of the cutting head frame; and
a second jaw pivotally mounted to said cutting head frame for selective
pivotal movement relative to said first jaw to allow controlled grasping action
between said first jaw and said second jaw.

9. An implement according to claim 8 and further comprising:
a hydraulic cylinder having a first end pivotally connected to the cutting
head frame; and
a piston slidingly extending from an opposite second end of the hydraulic
cylinder; said piston having a distal end pivotally connected to the second jaw
wherein actuation of the hydraulic cylinder drives the piston to provide the pivotal
movement of the second jaw relative to the first jaw.

10. An implement according to claim 6 wherein the bearing
mechanism comprises a first portion, and a second portion extending longitudinally
from the first portion; said first portion is removably secured to the cutting head
frame by a first set of securement members and said second portion is removably
secured to the cutting head frame by a second set of securement members; and
wherein removing said first and second sets of securement members releases the
drive shaft and bearing mechanism from the cutting head frame as a unit.

11. An implement according to claim 10 wherein said first set of
securement members are accessible from outside the cutting head frame; and
wherein said second set of securement members are housed within a portion of the
cutting head frame and accessible from an opening in the cutting head frame.

12. An implement for clearing brush and trees, comprising:
a self-propelled vehicle;
at least one boom mounted upon the vehicle; said one boom being
constructed for articulated motion of a distal end thereof;
a cutting head frame mounted to the distal end of the boom;
a motor mounted to the cutting head frame;
a drive shaft operatively coupled to the motor for rotation; said drive
shaft constructed to be selectively uncoupled from the motor;

a bearing mechanism removably secured to the cutting head frame and 9
supporting the drive shaft for the rotation; the bearing mechanism constructed to 10
be detached from the cutting head to facilitate replacement of the bearing 11
mechanism and drive shaft; 12
a cutting disk mounted on the drive shaft for cutting brush and trees 13
when rotated; and 14
a secondary power source on the self-propelled vehicle used to primarily 15
power the cutting disk. 16

13. An implement according to claim 12 and further comprising: 1
a shroud connected to the cutting head frame and extending about 2
portions of the cutting disk. 3

14. An implement according to claim 12 and further comprising: 1
a turret mounted for pivotal motion upon the self-propelled vehicle about 2
a generally vertical pivot axis relative a support for the self-propelled vehicle; and 3
wherein said boom is pivotally mounted on said turret for the articulated motion of 4
the distal end. 5

15. An implement for clearing brush and trees, comprising: 1
a vehicle; 2
a primary engine supported and operatively coupled to the vehicle to 3
move the vehicle across ground; 4
a boom mounted upon the vehicle; said boom being constructed for 5
articulated motion of a distal end thereof; 6
a cutting disk mounted to the distal end of said boom for cutting brush 7
and trees when rotated; and 8
an auxiliary engine supported on the vehicle and providing power to 9
rotate the cutting disk. 10

16. An implement according to claim 16 wherein the auxiliary engine 1
provides power only to the cutting disk. 2

17. An implement according to claim 16 and further comprising: 1
a cutting head frame pivotally mounted to the distal end of said boom 2
and supporting the cutting disk for rotation; and said cutting head frame providing 3
selective pivot action of the cutting disk about a pivot axis; and 4
a cutting head swivel operatively connected to the cutting head frame; 5
said cutting head swivel providing selective swivel action of the cutting disk about 6

a swivel axis which is generally traverse to the pivot axis of the pivoting cutting
head frame.

18. An implement according to claim 18 wherein the auxiliary engine
provides power to the cutting disk and to at least one of the following:

said cutting head frame for the selective pivot action of the cutting disk
about the pivot axis; and

said cutting head swivel for the selective swivel action of the cutting disk
about the swivel axis.